# IDENTITY PROTECTION USING BLOCK CHAIN

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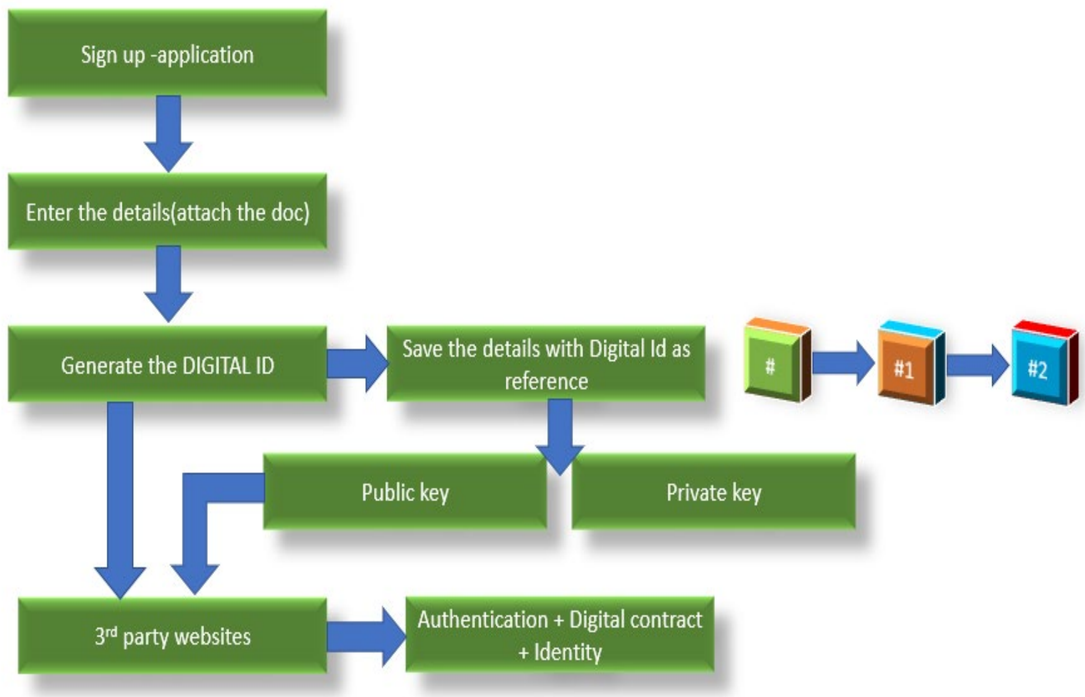
## Abstract:

**Blockchain can be utilized to make a stage that shields people's characters from burglary and enormously diminishes fake exercises. it can permit people the opportunity to make encrypted digital entities that will supplant various usernames and passwords while offering increasingly complete security highlights equipped for sparing clients and establishments important time and assets. In this publication we talk about the application that verifies the personality of the client ,and enables them to control their identity sharing to the outsiders like web based business sites. This is a hypothetical perspective on the application including the means how it functions.**

## Architecture:

**The design of the application is based on the simple steps, first the user sign up in to the application with details like name, password and mail id.as soon as the credentials is entered a account is created to the user ,in which he has to enter his identity details and also attaching the license or passport, as soon the documents are uploaded and if the doc and details are verified, a digital id is generated to the user. Here the data of the user is saved in the block chain so that the tampering of the data cannot be happened. Every data is saved with the digital id as reference on the block chain so that identifying the data of the user will be simple. The user has two keys, private and public key. The public key will be shared to read the data when needed, the algorithm will be written in such a way that whenever the user needs to share the identity to the e-commerce websites , he will use the Id given by our application, which indirectly share the details of the user in encrypted form which includes the authentication to the specific website and a digital contract which avoids the websites from misusing the data they get. The most specific plan is to (if possible) not to share the identity to the**

**Any site it is possible that it is unscrambled or encoded , the thought is to share just the computerized personality which maps to the client , which additionally helps the outsider folks to realize the client is confirmed and especially not phony. The actual scenario the application works is explained in the following diagram :**




## Conclusion:

**The application which we explained here can avoid the middle man for the clients and the users, like database which can be hacked. Moreover it will really help the user to control how his identity is being shared. It also helps to eradicate the identity theft and fraud which is the main concern. This can only be achievable with block which is difficult to tamper.**